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ABSTRACT

Johnson County Community College (JCCC) conducted a survey in response to faculty comments regarding entering students' lack of rudimentary computer skills. Faculty were spending time in non-computer related classes teaching students basic computer skills. The aim of the survey was to determine what the basic computer competencies for entering students should be, according to faculty perceptions. The survey was distributed to full- and part-time faculty and Admissions and Records, Financial Aid, and skills were: (1) starting/shutting down a computer; (2) typing; (3) opening and closing a file; (4) formatting, editing, saving, and printing a document; (5) saving a file to a floppy disk; (6) sending and receiving e-mail; (7) knowing the function of word processing software; (8) using a search engine; (9) copying a file to a hard disk/floppy; and (10) downloading information. The Instructional Computing Planning Advisory Committee (ICPAC) will use the findings to help create computer competency guidelines for entering students, develop a computer competency test, and develop a Computer Resource Center at JCCC. ICPAC may also consider additional research aimed at determining the proportion of incoming students who lack basic computer skills. (Contains numerous tables and figures.) (NB)

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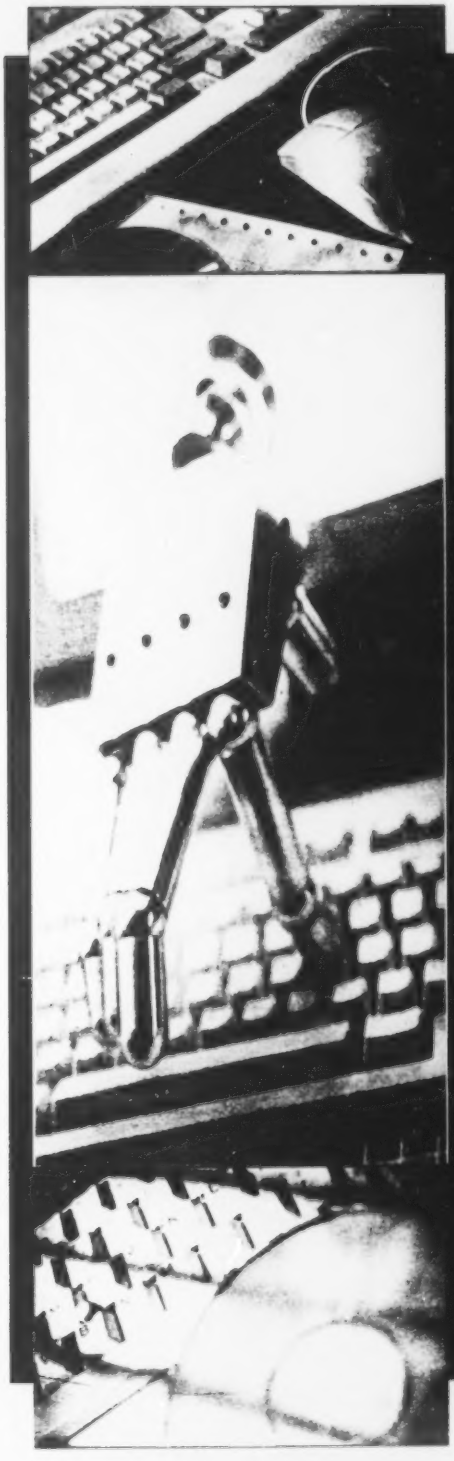

Importance of Computer Competencies for Entering JCCC Students: A Survey of Faculty and Staff

Office of Institutional Research

April 2000

JC010545

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IMPORTANCE OF COMPUTER COMPETENCIES FOR ENTERING JCCC STUDENTS:

A SURVEY OF FACULTY AND STAFF

Johnson County Community College
Office of Institutional Research
12345 College Boulevard
Overland Park, KS 66210-1299

April 2000

Table of Contents

	Page
Executive Summary	iii
Introduction	1
Position at JCCC	2
Courses Taught at JCCC	3
Teaching and Employment Tenure	4
Division	5
Importance of Computer Skills	6
Most Important Computer Skills	7
Most Important Computer Skills by Division	8
Most Important Computer Skills by Employment Status	9
Most Important Computer Skills by Level of Courses Taught	10
Least Important Computer Skills	11
Recommendations	12

List of Figures

Figure 1.	Position at JCCC	2
Figure 2.	Level of Courses Taught	3
Figure 3.	Number of Courses Taught	3
Figure 4.	Years Taught at JCCC	4
Figure 5.	Division	5
Figure 6.	Importance of Computer Skills	6
Figure 7.	Mean Importance of Computer Skills by Division	6
Figure 8.	Most Important Computer Skills	7
Figure 9.	Most Important Computer Skills by Employment Status	9
Figure 10.	Most Important Computer Skills by Level of Courses Taught	10
Figure 11.	Least Important Computer Skills	11

Appendices

Appendix A.	Tabled Survey Results	13
Appendix B.	Questionnaire	35
Appendix C.	Respondents' Verbatim Comments	41

Purpose

In response to comments from faculty regarding students who enter classes at JCCC without rudimentary computer skills (and who must be taught these by instructors teaching other subjects), the Instructional Computing Planning Advisory Committee (ICPAC) began a discussion of the feasibility of determining what basic computer competencies for entering JCCC students should be.

Methodology

As a result of this discussion, ICPAC asked the Office of Institutional Research to develop and administer a survey designed to identify faculty and student services' staff perceptions of basic computer skills necessary for entering JCCC students.

The surveys were distributed in Winter 1999-2000 to all full- and part-time faculty and Admissions & Records, Financial Aid, and Counseling staff. A total of 218 surveys were completed and returned (for an approximate response rate of 20-25%).

Respondent Profile

Respondent characteristics follow:

- Sixty percent of respondents were full-time faculty, one-third were part-time faculty, 5% were student services staff, and 1% were respondents who selected more than one of these categories.
- Almost 80% of responding faculty taught 100-level courses, just under half taught 200-level courses, and 8% taught developmental courses or Intermediate Algebra.
- Thirty-seven percent of responding faculty taught 1-2 courses during the current semester, one-third taught 3-4 courses, and 30% taught 5 or more courses.
- Eleven percent of responding faculty were in their first year of teaching at JCCC. Forty-six percent had taught at JCCC for 2 to 10 years. The remaining 43% had taught at JCCC for over 10 years.
- Divisions represented by responding faculty include Liberal Arts (32%); Science, Health Care, and Math (24%); Business and Technology (20%); and Computer Instruction and Media Resources (20%). No completed questionnaires were returned by faculty in the Physical Education and Athletics division.

Major Findings

- Almost 85% of respondents indicated that students' computer skills were very or somewhat important in achieving success in the courses they teach or in successfully using the service they provide.

- On a 5-point scale (5="Very important" to 1="Not at all important"), the mean importance of computer skills is as follows: all respondents (4.16); Computer Instruction and Media Resources division (4.79); Business & Technology division (4.36); Liberal Arts division (4.11); and Science, Health Care, and Math division (3.27).

- The 10 most important computer skills based on mean importance ratings are all very basic computer literacy skills: start/shut down computer (4.20); type (use a keyboard efficiently)(4.14); open and close a file (3.88); format, edit, save, and print a document (3.86); save a file to a floppy disk (3.84); send and receive an e-mail (3.83); know the function of word processing software (3.77); use a search engine (3.73); copy a file to a hard disk/floppy (3.72); and download information (3.61).

- In general, mean importance ratings for the most important computer skills indicate that full-time faculty place more importance on students having computer skills than do part-time faculty.

- With one exception (send and receive an e-mail), faculty teaching 200-level courses place more importance on students having the top-ranked computer skills than do faculty teaching 100-level courses.

Recommendations

Through this survey, faculty/staff have identified the most important computer skills that students should have when entering JCCC. This information provides ICPAC with a number of possible courses of action, including consideration of computer competency guidelines for entering JCCC students, development of a computer competency test (similar to the ASSET test) for incoming JCCC students, development of a Computer Resource Center at JCCC, and addition of a required "Intro to Computing" course to the curriculum.

ICPAC may also wish to consider additional research to determine the proportion of incoming students who do not have sufficient computer skills to successfully complete the requirements of their classes without significant additional instruction by faculty.

Purpose

In meetings throughout 1999, the Computer Literacy Committee, a sub-committee of the Instructional Computing Planning Advisory Committee (ICPAC), discussed the feasibility of determining what computer competencies students should have to be functional in various courses. This was partially in response to comments from a number of instructors that they had to spend valuable class time in providing students with instruction on how to use computers rather than being able to focus on their subject content.

Methodology

Based on this discussion, ICPAC requested that the Office of Institutional Research develop a survey designed to identify faculty (and selected staff) perceptions of basic computer skills entering JCCC students should possess to facililtate their success in college coursework.

Surveys were distributed in winter 1999-2000 to all full- and part-time faculty, as well as staff in the areas of Admissions & Records, Financial Aid, and Counseling.

In total, 218 surveys were completed and returned for an approximate response rate of 20-25% (due to the way in which the survyes were distributed, an exact response rate cannot be calculated).

Major findings are summarized in the bulleted points and figures on the following pages. Tabled results are attached to this report as Appendix A, a copy of the survey as Appendix B, and respondents' written comments from the survey as Appendix C.

Please direct any questions or comments about this survey to:

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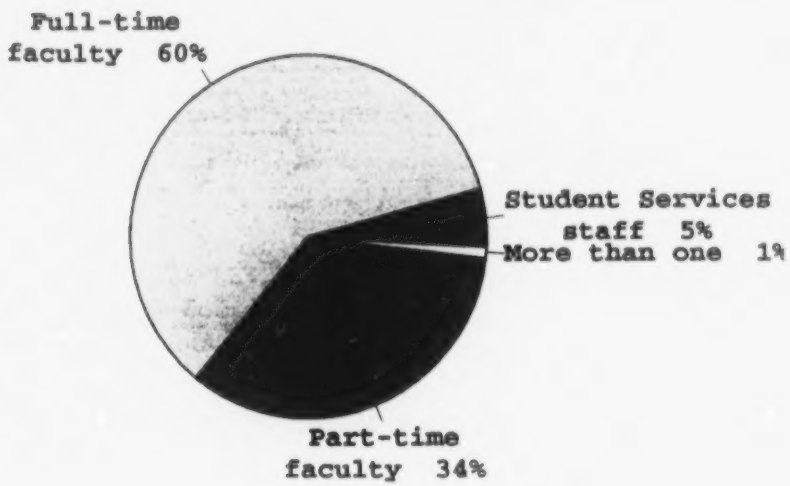
- Survey respondents were comprised of full-time faculty (60%), part-time faculty (34%), student services staff (5%), and respondents who selected more than one of these categories (1%). (See Table 1, and Figure 1, below.)

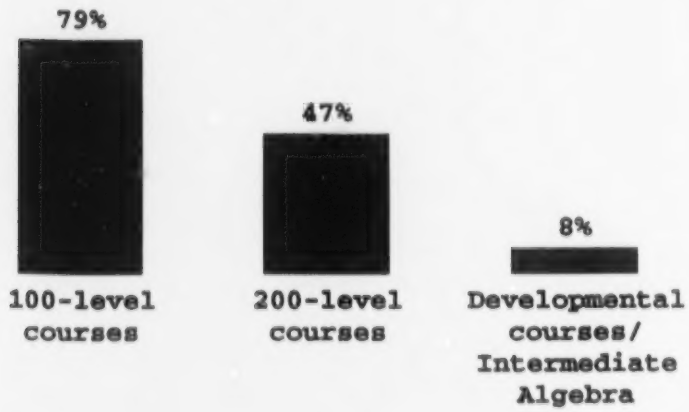
Figure 1
Position at JCCC



Level of Courses Taught

- Seventy-nine percent of responding faculty taught 100 level courses, just under half (47%) taught 200 level courses, and 8% taught developmental courses or Intermediate Algebra. (See Table 1 and Figure 2, below.)

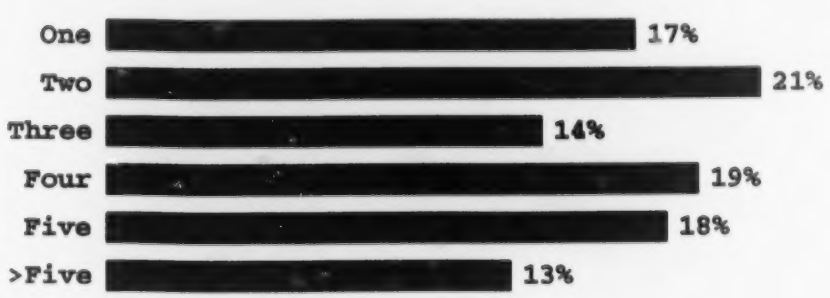
Figure 2
Level of Courses Taught



Number of Courses Taught

The number of courses taught during the current semester by faculty who responded to the survey was fairly evenly split: 38% taught 1-2 courses, 33% taught 3-4 courses, and 31% taught 5 or more courses. (See Table 1, Appendix A, and Figure 3, below.)

Figure 3
Number of Courses Taught

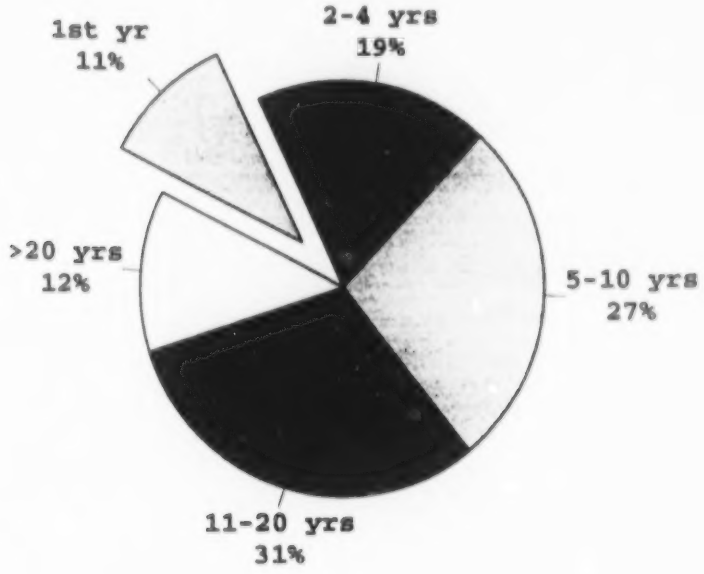


Teaching and Employment Tenure

- The breakdowns for the number of years *taught* at JCCC and *employed* at JCCC were virtually identical (see Table 2, Appendix A). Only *years taught* is depicted in Figure 4, below.

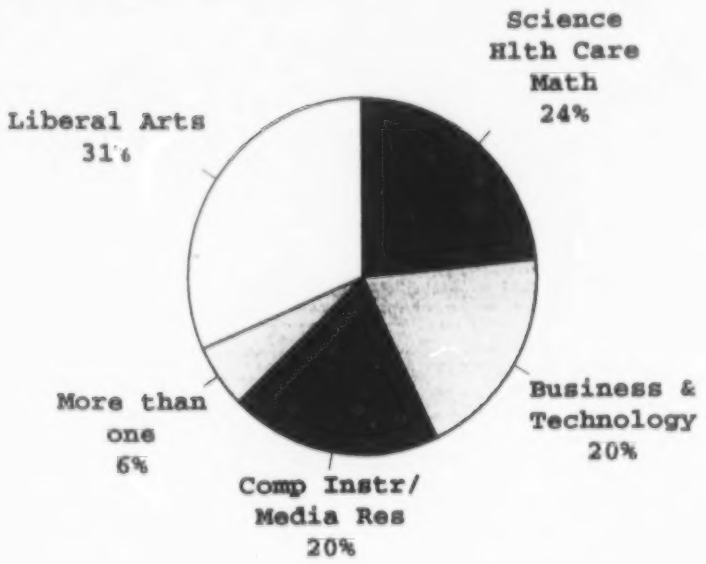
- With the exception of about 11% who were in their first year of teaching at JCCC, responding faculty generally had many years of experience teaching at JCCC. Over 40% of the respondents had taught at JCCC for over 10 years. This figure includes 12% who have taught at JCCC for over 20 years.

Figure 4
Years Taught at JCCC



- Two divisions were most heavily represented: Liberal Arts (31%) and Science, Health Care, and Math (24%). (See Table 3 and Figure 5, below.) The Business and Technology, and Computer Instruction and Media Resources divisions were each represented by 20% of respondents. Six percent of respondents indicated they taught in more than one division. No questionnaires were returned by faculty in the Physical Education and Athletics division.

Figure 5
Division



Importance of Computer Skills

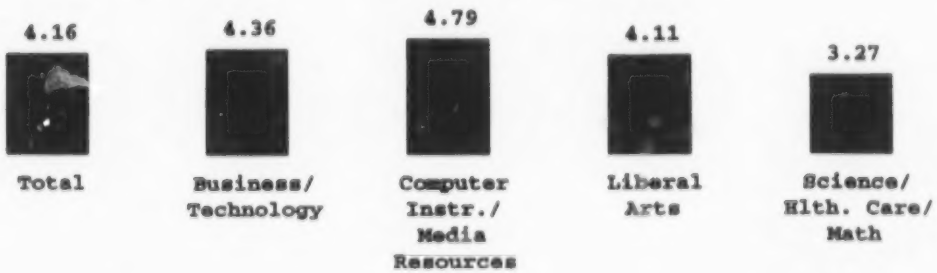
- Almost 85% of respondents indicated that students' computer skills were very or somewhat important in achieving success in the courses they teach or in successfully using the service they provide. (See Table 4, Appendix A, and Figure 6, below.)

Figure 6
Importance of Computer Skills

- The mean importance of computer skills by academic division is depicted in Table 6, Appendix A, and Figure 7, below. Faculty in the Computer Instruction and Media Resources division place the greatest importance on students having computer skills (mean of 4.79 on a 5-point scale, with 5="Very important" and 1="Not at all important").

  Students' computer skills were rated lowest in importance by faculty in the Science, Health Care, and Math division (mean=3.27).

Figure 7
Mean Importance of Computer Skills by Division

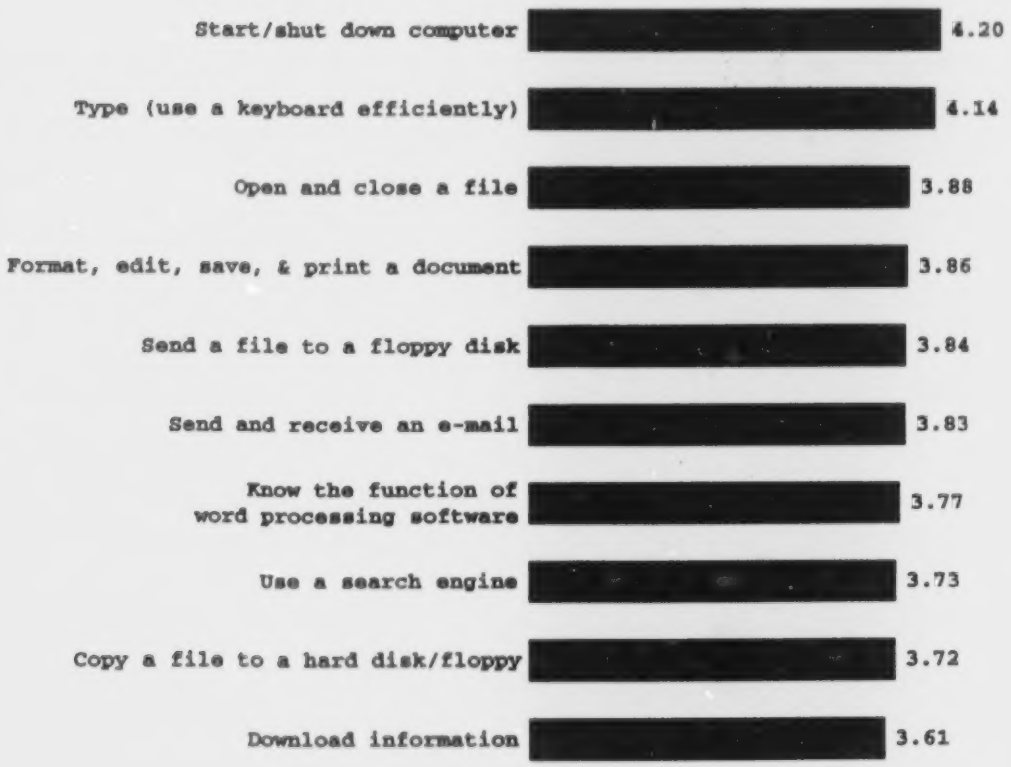


(Mean ratings: 5-point scale with 5="Very important" and 1="Not at all important")

Most Important Computer Skills

The twenty most important computer skills that all respondents indicated students should have are listed in Table 5, Appendix A, and the top ten are shown in Figure 8, below.

Figure 8
Most Important Computer Skills



(Mean ratings: 5-point scale with 5="Very important" and 1="Not at all important")

- The list of the "top twenty computer skills" consists of basic computer skills and competencies, as well as skills needed to successfully "navigate" the Internet. It includes the ability to use word processing software, Windows, e-mail, and the Internet.
- The "top twenty" list does not include any presentation graphics, database, or spreadsheet skills.

Most Important Computer Skills by Division

The ten most important computer skills are listed by division in Table 7, Appendix A.

- For three of the four divisions, Business and Technology; Liberal Arts; and Science, Health Care, and Math; nine of the ten most important computer skills for all respondents appear also in the division's top ten list.

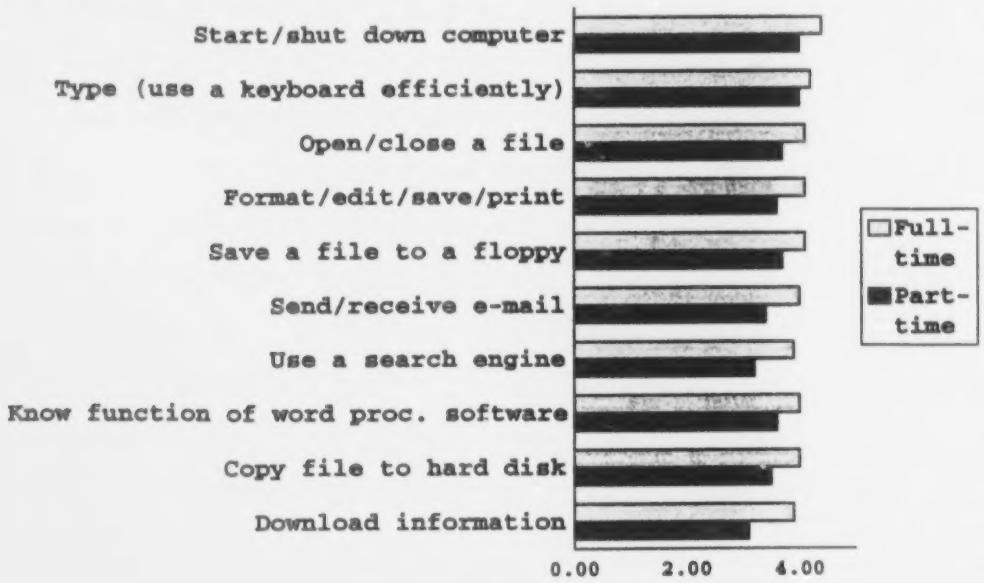
  The other most important computer skill for each division is as follows: Business and Technology - "Attach a document to an e-mail," Liberal Arts - "Basic knowledge of Microsoft Word," and Science, Health Care, and Math - "Basic Knowledge of Netscape Communicator."

- The top ten list for the Computer Instruction and Media Resources division contains four computer skills not on the top ten list for all respondents. These skills are: "Basic knowledge of Windows," "Identify computer hardware requirements," "Format a floppy disk," and "Set up directories/subdirectories/folders/files."

Most Impt. Computer Skills by Employment Status

- Table 9, Appendix A, and Figure 9, below, detail the most important student computer skills indicated by full- and part-time faculty. Full-time faculty, as evidenced by higher mean importance ratings, generally place more importance on students having the basic computer skills listed in the survey than do part-time faculty.

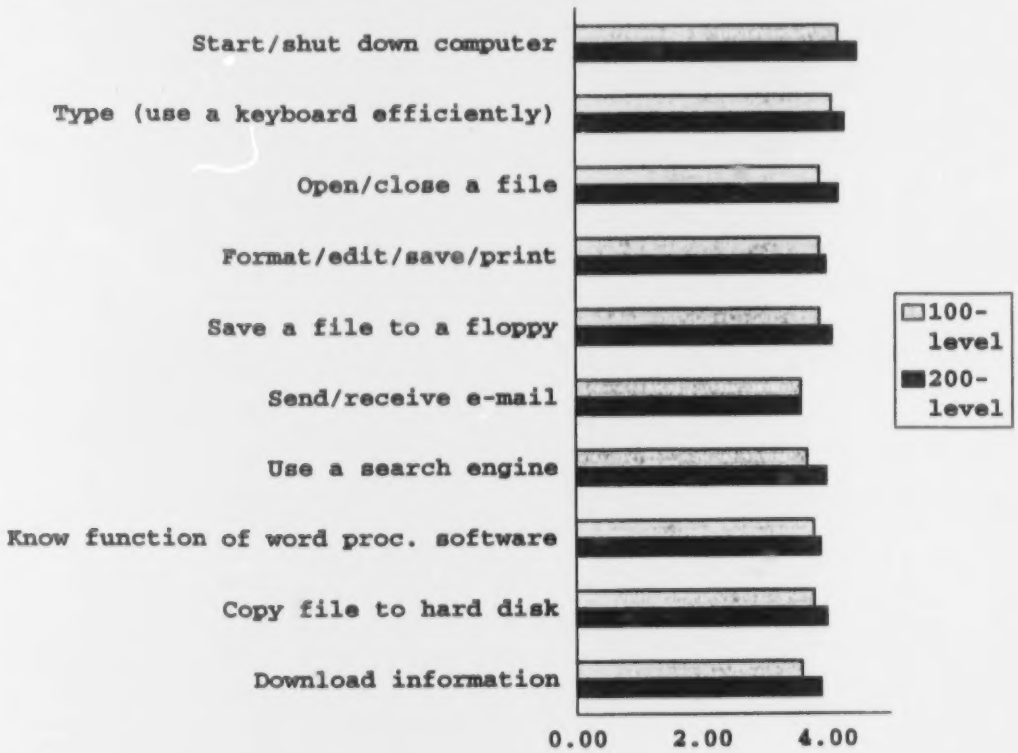
Figure 9
Most Important Computer Skills by Employment Status
(Mean ratings: 5-point scale with 5="Very important" and 1="Not at all important")



Most Impt. Computer Skills by Level of Courses Taught

- Faculty teaching 200-level courses indicated it is more important for students to have basic computer skills than did faculty teaching 100-level courses. The mean importance ratings for both groups are contained in Table 9, Appendix A, and in Figure 10, below.

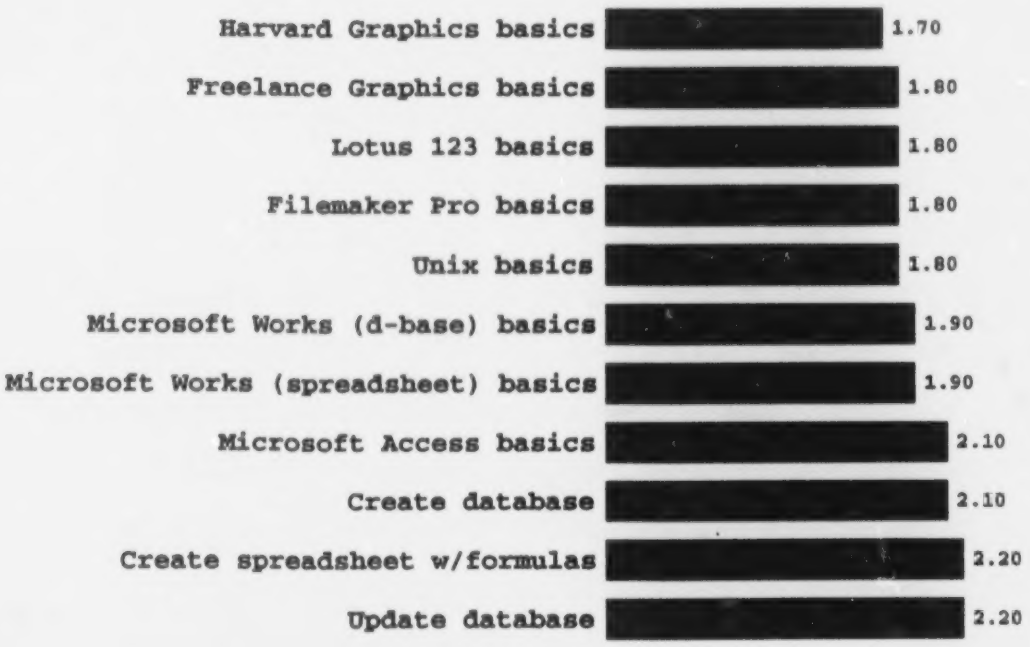
Figure 10
Most Important Computer Skills by Level of Courses Taught
(Mean ratings: 5-point scale with 5="Very important" and 1="Not at all important")



Least Important Computer Skills

- The computer skills rated by faculty and staff as least important are contained in Table 8, Appendix A, and Figure 11, below. The least important computer skills as rated by all respondents include knowledge of graphics/presentation software, database software, spreadsheet software, and networking software.

Figure 11
Least Important Computer Skills



(Mean ratings: 5-point scale with 5="Very important" and 1="Not at all important")

By identifying the student computer capabilities deemed by faculty and staff to be most important, this survey lays the groundwork for consideration of computer competency guidelines for incoming JCCC students. (Should computer competency guidelines be established, counselors would need to be trained to apprise students of the new computer competency requirements.)

In addition, one or more of the following might be considered by ICPAC:

- Development and administration of a computer competency test (similar to the ASSET test) for entering JCCC students.
- Development of a Computer Resource Center at JCCC.
- Addition of a required "Introduction to Computing" course.

Before taking one of these actions, ICPAC may wish to consider conducting additional research among faculty to determine what proportion of incoming students do not have sufficient computer skills to successfully complete the requirements of their classes without significant additional instruction by faculty.

APPENDIX A

TABLED SURVEY RESULTS

List of Tables

Page

Table 1. Respondent Profile 15

Table 2. Teaching and Employment Tenure 16

Table 3. Prefixes by Division 17

Table 4. Importance of Computer Skills 20

Table 5. Importance of Students Having Computer Skills . . . 21

Table 6. Mean Importance of Students Having Computer by Divison 26

Table 7. Ten Most Important Computer Skills by Divison . . . 31

Table 8. Ten Least Important Computer Skills by Division . . 32

Table 9. Ten Most Important Computer Skills by Employment Status and Level of Courses Taught 33

Table 1
Respondent Profile

	Number	Percent
What is your position at JCCC?		
Full-time faculty	131	60.1%
Part-time faculty	74	33.9
Admissions & Records staff	4	1.8
Counseling staff	5	2.3
Financial Aid staff	1	0.5
Library staff	1	0.5
More than one checked	2	0.9
No. of respondents	218	100.0%
What level of courses do you teach? ***(multiple responses allowed)***		
100's	173	79.4%
200's	103	47.2
Developmental courses or Intermediate Algebra	18	8.3
No. of respondents	218	100.0%
How many courses are you teaching at JCCC this semester?		
One	33	16.6%
Two	41	20.6
Three	28	14.1
Four	37	18.6
Five	35	17.6
More than 5	25	12.6
No. of respondents	199	100.1%

Table 2
Teaching and Employment Tenure

	Number	Percent
Including this year, how many years have you *taught* at JCCC?		
1st year	22	10.8%
2-4	38	18.6
5-7	27	13.2
8-10	29	14.2
11-13	31	15.2
14-17	20	9.8
18-20	12	5.9
More than 20	25	12.3
No. of respondents	204	100.0%
Including this year, how many years have you been employed at JCCC?		
1st year	22	10.2%
2-4	39	18.1
5-7	32	14.8
8-10	30	13.9
11-13	33	15.3
14-17	20	9.3
18-20	14	6.5
More than 20	26	12.0
No. of respondents	216	100.1%

Table 3
Prefixes by Division *(full-/part-time faculty only)*

	Number	Percent
Prefixes by Division		
Business & Technology prefixes	39	19.5%
Computer Instruction & Media Resources prefixes	39	19.5
Liberal Arts prefixes	63	31.5
Science, Health Care, & Math prefixes	48	24.0
Physical Education & Athletics prefixes	0	0.0
More than one checked	11	5.5
No. of respondents	200	100.0%
Business & Technology		
ACCT	7	3.5%
AUTO	0	0.0
AIB	0	0.0
BUS	7	3.5
BUSE	2	1.0
CET	0	1.0
DRAF	0	0.0
ECON	1	0.5
ELEC	2	1.0
ENGR	0	0.0
FASH	1	0.5
HVAC	1	0.5
HMEC	0	0.0
HMGT	2	1.0
INDT	0	0.0
IT	7	3.5
ITMD	3	1.5
MKT	2	1.0
MFAB	0	0.0
OST	2	1.0
PL	2	1.0
RR (all)	0	0.0
No. of respondents	39	19.5%

Table 3 (continued)
Prefixes by Division *(full-/part-time faculty only)*

	Number	Percent
Computer Instruction & Media Resources		
CD	4	2.0%
CDTP	1	0.5
CIM	2	1.0
CS	1	0.5
CPCA	13	6.5
DP	17	8.5
LIBR	1	0.5
No. of respondents	39	19.5%
Liberal Arts		
ADMJ	1	0.5%
AGRI	0	0.0
ANTH	0	0.0
ARCH	0	0.0
ART	1	0.5
EDUC	0	0.0
ENGL	29	14.5
FIRE	0	0.0
FL	1	0.5
HIST	3	1.5
HUM	1	0.5
INTR	2	1.0
JOUR	1	0.5
LC	2	1.0
LS	1	0.5
MUS	4	2.0
PHIL	0	0.0
PHOT	0	0.0
POLS	2	1.0
PSYC	5	2.5
REL	0	0.0
SOC	3	1.5
SPD	5	2.5
THEA	2	1.0
No. of respondents	63	31.5%

Table 3 (continued)
Prefixes by Division *(full-/part-time faculty only)*

	Number	Percent
Science, Health Care, & Math		
ASTR	2	1.0%
AVHO	0	0.0
AVPN	2	1.0
BIOL	13	6.5
CHEM	12	6.0
DHYG	1	0.5
EMS	0	0.0
GEOS	2	1.0
HORT	1	0.5
MATH	8	4.0
NURS	4	2.0
PHYS	2	1.0
PSCI	0	0.0
RC	1	0.5
No. of respondents	48	24.0%
Physical Education & Athletics		
HPER	0	0.0%
No. of respondents	0	0.0%
More than One Division	11	5.5%

Table 4
Importance of Computer Skills

	Number	Percent
How important are computer skills for your students in achieving success in the course(s) you teach OR in successfully using the service you provide?		
Very important(5)	100	46.3%
Somewhat important(4)	82	38.0
Neither unimportant or unimportant(3)	13	6.0
Not very important(2)	10	4.6
Not at all important(1)	11	5.1
Mean	4.16	
No. of respondents	216	100.0%

Table 5
Importance of Students Having Computer Skills

	Mean	n	Important	Neutral	Not Important
BASIC COMPUTER TECHNOLOGY/ TERMINOLOGY					
Start/shut down computer	4.20	214	80.8%	6.5%	12.6%
Identify computer hardware components	3.40	211	57.3	10.4	32.2
Type (use a keyboard efficiently)	4.14	213	81.2	7.0	11.7
Know the function of word processing software	3.77	212	67.9	12.7	19.3
Know the function of spreadsheet software	2.47	212	24.5	22.6	52.8
Know the function of database software	2.53	213	26.8	22.5	50.7
Know the function of graphics software	2.47	212	25.5	23.1	51.4
Know the function of communications software	3.02	212	45.3	17.9	36.8

Note: Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important. "Imporant" sums "Very" and "Somewhat important" responses; "Not important" sums "Not very" and "Not at all important" responses.

Table 5 (continued)
Importance of Students Having Computer Skills

	Mean	n	Important	Neutral	Not Important
BASIC OPERATING SYSTEMS					
Set up directories/subdirectories/ folders/files	3.06	211	45.5%	15.2%	39.3%
Open and close a file	3.88	214	72.4	7.5	20.1
Save a file to a floppy disk	3.84	213	70.0	8.5	21.6
Copy a file to a hard drive/floppy	3.72	210	65.7	11.4	22.9
Format a floppy disk	3.36	214	52.3	17.8	29.9
Basic knowledge of DOS	2.33	211	23.2	20.9	55.9
Basic knowledge of Windows	3.55	214	62.6	12.1	25.2
Basic knowledge of Mac OS	2.35	210	24.3	20.5	55.2
Basic knowledge of Unix	1.83	208	8.7	19.7	71.6
Basic knowledge of networks	2.27	211	22.7	18.5	58.8

Note: Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important. "Imporant" sums "Very" and "Somewhat important" responses; "Not important" sums "Not very" and "Not at all important" responses.

29

30

Table 5 (continued)
Importance of Students Having Computer Skills

	Mean	n	Important	Neutral	Not Important
PRESENTATION/GRAPHICS					
Develop a presentation using computer graphics	2.37	213	23.9%	23.5%	52.6%
Give a presentation using computer graphics	2.29	213	21.1	23.0	55.9
Basic knowledge of PowerPoint	2.20	212	18.9	22.2	59.0
Basic knowledge of Freelance Graphics	1.76	212	4.7	25.0	70.3
Basic knowledge of Harvard Graphics	1.74	212	2.3	26.4	70.8
WORD PROCESSING					
Format, edit, save, & print a document	3.86	215	70.7%	9.8%	19.5%
Send a document via e-mail	3.47	213	60.1	14.1	25.8
Basic knowledge of Microsoft Word	3.54	213	61.5	15.0	23.5
Basic knowledge of Word Perfect	2.92	212	42.0	22.0	35.8
Basic knowledge of Microsoft Works	2.73	212	34.4	24.1	41.5

Note: Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important. "Imporant" sums "Very" and "Somewhat important" responses; "Not important" sums "Not very" and "Not at all important" responses.

Table 5 (continued)
Importance of Students Having Computer Skills

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Mean	n	Important	Neutral	Not Important
BROWSERS/INTERNET USE & TECHNOLOGY					
Use a search engine	3.73	214	67.8%	9.8%	22.4%
Download information	3.61	214	66.4	9.3	24.3
Link a website into an e-mail	2.96	212	39.6	22.6	37.7
Basic knowledge of Internet Explorer	3.49	214	60.3	14.0	25.7
Basic knowledge of Netscape Communicator	3.52	215	61.4	13.5	25.1
SPREADSHEET					
Open a spreadsheet	2.34	211	24.6%	18.5%	56.9%
Create a spreadsheet with formulas	2.17	211	17.1	22.7	60.2
Construct a chart/graph from a spreadsheet	2.21	211	20.4	20.4	59.2
Basic knowledge of Microsoft Excel	2.24	211	19.0	22.7	58.3
Basic knowledge of Lotus 123	1.80	212	7.1	23.1	69.8
Basic knowledge of Microsoft Works	1.93	212	10.8	23.1	66.0

33

Note: Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important. "Imporant" sums "Very" and "Somewhat important" responses; "Not important" sums "Not very" and "Not at all important" responses.

34

Table 5 (continued)
Importance of Students Having Computer Skills

	Mean	n	Important	Neutral	Not Important
DATABASE					
Open a database	2.35	212	24.1	20.3	55.7
Create a database	2.13	212	15.6	23.6	60.8
Retrieve information from a database	2.41	213	25.4	21.1	53.5
Update a database	2.17	212	16.5	24.1	59.4
Basic knowledge of Microsoft Access	2.09	211	13.7	24.2	62.1
Basic knowledge of Filemaker Pro	1.82	212	6.1	25.0	68.9
Basic knowledge of Microsoft Works	1.90	212	9.0	24.5	66.5
E-MAIL					
Send and receive an e-mail	3.83	214	71.0%	10.3%	18.7%
Attach a document to an e-mail	3.52	213	61.0	13.6	25.4
Basic knowledge of Outlook e-mail	2.87	210	38.6	24.3	37.1
Basic knowledge of Internet e-mail	3.09	212	46.7	19.8	33.5
Basic knowledge of Exchange e-mail	2.76	212	34.4	25.9	39.6

Note: Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important. "Imporant" sums "Very" and "Somewhat important" responses; "Not important" sums "Not very" and "Not at all important" responses.

Table 6
Mean Importance of Students Having Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
BASIC COMPUTER TECHNOLOGY/ TERMINOLOGY					
Start/shut down computer	4.20	4.41	4.41	4.40	3.54
Identify computer hardware components	3.40	3.76	3.97	3.36	2.75
Type (use a keyboard efficiently)	4.14	4.03	4.51	4.48	3.30
Know the function of word processing software	3.77	3.97	3.68	4.38	3.04
Know the function of spreadsheet software	2.47	3.05	3.19	1.69	2.19
Know the function of database software	2.53	2.90	3.27	2.21	1.94
Know the function of graphics software	2.47	2.77	3.27	2.05	2.06
Know the function of communications software	3.02	3.51	3.32	3.08	2.29

Table 6 (continued)
Mean Importance of Students Having Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
BASIC OPERATING SYSTEMS					
Set up directories/subdirectories/ folders/files	3.06	3.67	4.00	2.93	2.04
Open and close a file	3.88	4.00	4.11	4.37	3.17
Save a file to a floppy disk	3.84	4.05	4.19	4.33	3.02
Copy a file to a hard drive/floppy	3.72	4.00	4.14	4.17	2.79
Format a floppy disk	3.36	3.77	3.97	3.77	2.21
Basic knowledge of DOS	2.33	2.74	2.92	2.17	1.67
Basic knowledge of Windows	3.55	3.77	3.78	3.86	2.67
Basic knowledge of Mac OS	2.35	2.00	2.83	2.59	2.04
Basic knowledge of Unix	1.83	2.00	2.31	1.65	1.40
Basic knowledge of networks	2.27	2.59	2.60	2.25	1.69

Table 6 (continued)
Mean Importance of Students Having Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
PRESENTATION/GRAPHICS					
Develop a presentation using computer graphics	2.37	2.82	2.97	3.30	1.69
Give a presentation using computer graphics	2.29	2.80	2.97	2.18	1.60
Basic knowledge of PowerPoint	2.20	2.69	2.70	2.12	1.60
Basic knowledge of Freelance Graphics	1.76	2.05	2.03	1.73	1.44
Basic knowledge of Harvard Graphics	1.74	2.00	1.95	1.73	1.44
WORD PROCESSING					
Format, edit, save, & print a document	3.86	4.13	3.65	4.52	3.02
Send a document via e-mail	3.47	3.85	3.57	3.74	2.77
Basic knowledge of Microsoft Word	3.54	3.80	3.41	4.15	2.71
Basic knowledge of Word Perfect	2.92	2.92	2.38	3.80	2.35
Basic knowledge of Microsoft Works	2.73	2.59	2.16	3.55	2.19

Table 6 (continued)
Mean Importance of Students Having Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
BROWSERS/INTERNET USE & TECHNOLOGY					
Use a search engine	3.73	3.95	3.43	3.92	3.21
Download information	3.61	3.95	3.49	3.81	2.94
Link a website into an e-mail	2.96	3.28	3.05	2.97	2.40
Basic knowledge of Internet Explorer	3.49	3.59	3.32	3.81	2.92
Basic knowledge of Netscape Communicator	3.52	3.67	3.30	3.76	3.04
SPREADSHEET					
Open a spreadsheet	2.34	2.90	2.84	1.68	2.21
Create a spreadsheet with formulas	2.17	2.72	2.68	1.53	1.96
Construct a chart/graph from a spreadsheet	2.21	2.59	2.70	1.63	2.15
Basic knowledge of Microsoft Excel	2.24	2.82	2.76	1.62	1.98
Basic knowledge of Lotus 123	1.80	2.21	2.08	1.52	1.63
Basic knowledge of Microsoft Works	1.93	2.21	1.97	1.80	1.79

Table 6 (continued)
Mean Importance of Students Having Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
DATABASE					
Open a database	2.35	2.59	2.95	2.13	1.87
Create a database	2.13	2.51	2.81	1.72	1.65
Retrieve information from a database	2.41	2.64	2.92	2.18	1.90
Update a database	2.17	2.62	2.81	1.70	1.71
Basic knowledge of Microsoft Access	2.09	2.54	2.84	1.65	1.62
Basic knowledge of Filemaker Pro	1.82	2.15	1.97	1.60	1.63
Basic knowledge of Microsoft Works	1.90	2.13	1.95	1.92	1.67
E-MAIL					
Send and receive an e-mail	3.83	4.21	3.73	4.02	3.31
Attach a document to an e-mail	3.52	3.95	3.73	3.67	2.73
Basic knowledge of Outlook e-mail	2.87	3.40	2.78	2.86	2.40
Basic knowledge of Internet e-mail	3.09	3.23	3.22	3.30	2.48
Basic knowledge of Exchange e-mail	2.76	3.18	2.78	2.80	2.19

Table 7
Ten Most Important Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
Start/shut down computer	4.20	4.41	4.41	4.40	3.54
Type (use a keyboard efficiently)	4.14	4.03	4.51	4.48	3.30
Open and close a file	3.88	4.00	4.11	4.37	3.17
Format, edit, save, & print a document	3.86	4.13	4.11	4.52	3.02
Save a file to a floppy disk	3.84	4.05	4.19	4.33	3.02
Send and receive an e-mail	3.83	4.21		4.02	
Know the function of wrd. pro. soft.	3.77	3.97		4.38	3.04
Use a search engine	3.73	3.95		3.92	3.21
Copy a file to a hard disk/floppy	3.72	4.00	4.14	4.17	2.94
Download information	3.61	3.95			2.94
Basic knowledge of Windows	3.55		3.78		
Basic knowledge of Microsoft Word	3.54			4.15	
Attach a document to an e-mail	3.52	3.95			
Basic knowledge of Netscape Communicator	3.52				3.04
Basic knowledge of Internet Explorer	3.49				
Send a document via e-mail	3.47				
Identify computer hardware components	3.40		3.97		
Format a floppy disk	3.36		3.97		
Basic knowledge of Internet e-mail	3.09				
Set up directories/subdirectories/ folders/files	3.06		4.00		

Table 8
Ten Least Important Computer Skills by Division

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	Total	Business and Technology	Computer Instruction/ Media Res.	Liberal Arts	Science/ Health Care/Math
Basic knowledge of Harvard Graphics	1.74	2.00	1.95	1.73	1.44
Basic knowledge of Freelance Graphics	1.76	2.05	2.03	1.73	1.44
Basic knowledge of Lotus 123	1.80	2.21		1.52	1.63
Basic knowledge of Filemaker Pro	1.82	2.15	1.97	1.60	1.63
Basic knowledge of Unix	1.83	2.00	2.31	1.65	1.40
Basic knowl. of Microsoft Wks (dbse)	1.90	2.13	1.95		1.67
Basic knowl. of Microsoft Wks (sprd)	1.93	2.21	1.97		
Basic knowledge of Microsoft Access	2.09			1.65	1.62
Create a database	2.13			1.73	1.65
Create a spreadsheet with formulas	2.17		2.68	1.53	
Update a database	2.17				
Basic knowledge of PowerPoint	2.20				1.60
Construct chart/graph from spreadsht.	2.21	2.59	2.59	1.63	
Basic knowledge of networks	2.27	2.59			
Give presentation using com. graphics	2.29			1.60	
Basic knowledge of DOS	2.33			1.62	
Basic knowledge of Microsoft Excel	2.34				
Open a spreadsheet	2.34			1.68	
Basic knowledge of Mac OS	2.35	2.00			
Develop a pres. using com. graphics	2.37				
Know function of sprdsht. software	2.47			1.69	
Basic knowl.Microsoft Works (wp)	2.73	2.59	2.16		
Basic knowledge of Word Perfect	2.92		2.38		

Table 9
Ten Most Important Computer Skills by Employment Status and Level of Courses Taught

Mean importance is on a 5-point scale with 1=Not at all important and 5=Very important.	**Total**	**Full-time**	**Part-time**	**100-level courses**	**200-level courses**
Start/shut down computer	4.20	4.37	3.95	4.16	4.52
Type (use a keyboard efficiently)	4.14	4.23	3.97	4.09	4.29
Open and close a file	3.88	4.10	3.74	3.91	4.17
Format, edit, save, & print a document	3.86	4.08	3.63	3.89	3.99
Save a file to a floppy disk	3.84	4.06	3.74	3.89	4.13
Send and receive an e-mail	3.83	4.04	3.44	3.63	3.56
Know the function of word Processing software	3.77	3.98	3.58	3.81	3.93
Use a search engine	3.73	3.94	3.23	3.65	3.97
Copy a file to a hard disk/floppy	3.72	3.98	3.54	3.76	4.03
Download information	3.61	3.86	3.11	3.56	3.87

APPENDIX B

QUESTIONNAIRE

IMPORTANCE OF COMPUTER COMPETENCIES FOR ENTERING JCCC STUDENTS:
A SURVEY OF FACULTY & STAFF
(for traditional classroom courses & student services)

1. What is your position at JCCC?

- O Full-time faculty
- O Part-time faculty
- O Admissions & Records staff>>> **GO TO Q6**
- O Counseling staff>>> **GO TO Q6**
- O Financial Aid staff>>> **GO TO Q6**
- O Library staff>>> **GO TO Q6**

2. What level of courses do you teach? *Mark all that apply*

- O Developmental courses or intermediate algebra
- O 100's - college level
- O 200's - college level

3. Please fill in the ONE bubble below that indicates the prefix of MOST of the traditional classroom course(s) you teach at JCCC. *If you do not teach, GO TO Q6.*

BUSINESS & TECHNOLOGY

O ACCT	O BUSE	O ELTE	O HVAC	O IT	O OST	O RR programs (all)
O AUTO	O CET	O ELEC	O HMEC	O ITMD	O PL	
O AIB	O DRAF	O ENGR	O HMGT	O MKT		
O BUS	O ECON	O FASH	O INDT	O MFAB		

COMPUTER INSTRUCTION & MEDIA RESOURCES

O CD O CDTP O CIM O CS O CPCA O DP O LIBR

LIBERAL ARTS

O ADMJ	O ARCH	O ENGL	O HIST	O JOUR	O MUS	O POLS	O SOC
O AGRI	O ART	O FIRE	O HUM	O LC	O PHIL	O PSYC	O SPD
O ANTH	O EDUC	O FL	O INTR	O LS	O PHOT	O REL	O THEA

SCIENCE, HEALTH CARE, & MATH

O ASTR	O AVPN	O CHEM	O EMS	O HORT	O NURS	O PSCI
O AVHO	O BIOL	O DHYG	O GEOS	O MATH	O PHYS	O RC

PHYSICAL EDUCATION & ATHLETICS

O HPER

4. How many courses are you teaching at JCCC this semester?

O 1 O 2 O 3 O 4 O 5 O More than 5

5. Including this year, how many years have you *taught* at JCCC?

O 1st year O 2-4 O 5-7 O 8-10 O 11-13 O 14-17 O 18-20 O More than 20

6. Including this year, how many years have you *been employed* at JCCC?

O 1st year O 2-4 O 5-7 O 8-10 O 11-13 O 14-17 O 18-20 O More than 20

7. How important are computer skills for your students in achieving success in the course(s) you teach OR in successfully using the service you provide?

- O Not at all important
- O Not very important
- O Neither important nor unimportant
- O Somewhat important
- O Very important

8. Please indicate how important it is for students in *most* of your traditional classroom courses to *already* have each of the skills/abilities listed below when entering your course(s) OR when using the service you provide.

	Not at all important	Not very important	Neither important nor unimportant	Somewhat important	Very important
BASIC COMPUTER TECHNOLOGY/TERMINOLOGY					
A. Start/shut down computer	0	0	0	0	0
B. Identify computer hardware components	0	0	0	0	0
C. Type (use a keyboard efficiently) . .	0	0	0	0	0
D. Know the function of word processing software	0	0	0	0	0
E. Know the function of spreadsheet software	0	0	0	0	0
F. Know the function of database software	0	0	0	0	0
G. Know the function of graphics software	0	0	0	0	0
H. Know the function of communications software	0	0	0	0	0
BASIC OPERATING SYSTEM(S)					
A. Set up directories/sub-directories/folders/files	0	0	0	0	0
B. Open and close a file	0	0	0	0	0
C. Save a file to a floppy disk	0	0	0	0	0
D. Copy a file to a hard drive/floppy .	0	0	0	0	0
E. Format a floppy disk	0	0	0	0	0
F. Basic knowledge of DOS	0	0	0	0	0
G. Basic knowledge of Windows	0	0	0	0	0
H. Basic knowledge of Mac OS	0	0	0	0	0
I. Basic knowledge of Unix	0	0	0	0	0
J. Basic knowledge of networks	0	0	0	0	0
PRESENTATION/GRAPHICS					
A. Develop a presentation using computer graphics	0	0	0	0	0
B. Give a presentation using computer graphics	0	0	0	0	0
C. Basic knowledge of Powerpoint	0	0	0	0	0
D. Basic knowledge of Freelance Graphics	0	0	0	0	0
E. Basic knowledge of Harvard Graphics .	0	0	0	0	0

	Not at all important	Not very important	Neither important nor unimportant	Somewhat important	Very important
WORD PROCESSING					
A. Format, edit, save, & print a document	0	0	0	0	0
B. Send a document via e-mail	0	0	0	0	0
C. Basic knowledge of Microsoft Word . .	0	0	0	0	0
D. Basic knowledge of Word Perfect . . .	0	0	0	0	0
E. Basic knowledge of Microsoft Works .	0	0	0	0	0
BROWSERS/INTERNET USE & TECHNOLOGY					
A. Use a search engine	0	0	0	0	0
B. Download information	0	0	0	0	0
C. Link a website into an e-mail	0	0	0	0	0
D. Basic knowledge of Internet Explorer	0	0	0	0	0
E. Basic knowledge of Netscape Communicator	0	0	0	0	0
SPREADSHEET					
A. Open a spreadsheet	0	0	0	0	0
B. Create a spreadsheet with formulas .	0	0	0	0	0
C. Construct a chart/graph from a spreadsheet	0	0	0	0	0
D. Basic knowledge of Microsoft Excel .	0	0	0	0	0
E. Basic knowledge of Lotus 123	0	0	0	0	0
F. Basic knowledge of Microsoft Works .	0	0	0	0	0
DATABASE					
A. Open a database	0	0	0	0	0
B. Create a database	0	0	0	0	0
C. Retrieve information from a database	0	0	0	0	0
D. Update a database	0	0	0	0	0
E. Basic knowledge of Microsoft Access .	0	0	0	0	0
F. Basic knowledge of Filemaker Pro . .	0	0	0	0	0
G. Basic knowledge of Microsoft Works .	0	0	0	0	0
E-MAIL					
A. Send and receive an e-mail	0	0	0	0	0
B. Attach a document to an e-mail . . .	0	0	0	0	0
C. Basic knowledge of Outlook e-mail . .	0	0	0	0	0
D. Basic knowledge of Internet e-mail .	0	0	0	0	0
E. Basic knowledge of Exchange e-mail .	0	0	0	0	0

COMMENTS

In the space below, please write any comments you may have about any aspect of students' computer literacy. Include your name only if you would like ICPAC to reply.

Thank you for taking the time to complete this important survey.

Please return your completed survey to your director or to Institutional Research, Box 9.

APPENDIX C

RESPONDENTS' VERBATIM COMMENTS

Importance of Computer Competencies for Entering JCCC Students:
A Survey of Faculty and Staff
Respondents' Verbatim Comments

Accessing Web Site

162 Our students need to be able to utilize our web-based registration system - EASI and how to electronically apply for financial aid - FAFSA!

166 To enroll via web or access information on the EASI System students need very basic computer skills. The EASI System walks students through the process. However, the more familiar a student is with the web the more comfortable the student feels in accessing information or enrolling via web.

160 . . . The more students know about how to utilize the Internet, the better service we can provide them.

160 From an Admissions/Registration/Records perspective, it has become vital that students know how to access our web site to retrieve information, enroll, and see record information (i.e. grades) . . .

Business Community Expectations

151 . . .The Johnson County business community expects our students to be computer literate, so I do my best to prepare them. . . .

Computer Literacy Requirements

147 I believe there should be a certain level of computer literacy that all students should be required to have to get a degree at JCCC.

161 This Committee is timely and some recommendations are very much needed.

181 I often have 2-3 students who don't know how to save files or how to create folders. Introduction to PC or MAC should be required for all students.

Computer Proficiency

139 Computer familiarity should not be a hurdle for students entering courses. Necessary skills should be taught in appropriate courses.

151 I teach traditional Comp I classes as well as developmental writing center courses. I encourage all my students to use the computer for e-mail, word processing, presentations, and research. If I'm not scheduled for a computer classroom, I make arrangements with Educational Technology to use LIB 373 for at least one hands-on class period during the semester. I give extra credit for students who are motivated to learning how to insert graphics, tables, charts, or other specialized formatting techniques.

178 The computer can be very helpful in the class I teach. However, practical hand skills are what I grade on. So, as much as I like the computer age and keep up with it myself, I have deliberately not kept computer skills a requirement for class sessions.

199 This is difficult. This is what I teach, so it doesn't matter whether they know this or not - particularity for the introduction courses.

201 Students, overall, are more literate than a year ago. I rarely meet a student who is intimidated by the equipment or technology.

Importance of Computer Competencies for Entering JCCC Students:
A Survey of Faculty and Staff
Respondents' Verbatim Comments

Computer Skills Important

158 It is important for our students to be computer literate. They learn many types of software and programs throughout their education while earning OST requirements of the program.

163 The greater the student's knowledge of Windows, the Internet, and e-mail, the greater his/her opportunities to access information are. Those students are better able to participate actively in their career and educational planning.

Computer Skills Needed for Classes

012 My students need to use the computer for research and writing.

138 No specific computer use is required for course work, which I currently teach.

142 . . . Also they have a presentation and a paper due at the end of the semester in which they could use PowerPoint as an audio/visual prop.

143 Students need to be able to use CD Rom for my class.

149 I teach computer classes so most of these skills are essential or covered in the class.

156 The computer components of my courses are fairly specialized to mathematics. The only basic knowledge is how to move from the "on switch" through the operating system to the math software.

157 Keyboarding skills are necessary. I have opportunities to acquaint students with some programs. They need to be able to use some word processing, web browser, and e-mail - I don't care which ones.

165 Our students still need a basic understanding of DOS including - File various conventions - Creating file and directories and subdirectories - Format - Partition. As well as, basic PC skills like how to use WP, SS, DB, PP. Using e-mail, browsers, etc.

216 If a student has a dictionary, and a typewriter, they don't need a computer at all - for my courses.

Computer Skills Needed in the Future

148 Almost all of the items marked "not very important" will become increasingly important in the near future.

164 I tried to answer the questions as they apply right now but I can see that in the very near future the importance of this will be greater than it is right now. In fact, most of the items marked somewhat important will be very important.

Importance of Computer Competencies for Entering JCCC Students:
A Survey of Faculty and Staff
Respondents' Verbatim Comments

E-mail

138 E-Mail is an option for students who need to communicate with me, outside of class time, and is useful in that regard for some.

216 Somewhat poor questions examples. . . It is relevant to know how to send e-mail but not from within a specific e-mail package. MS - Outlook is no more important than Netscape Communicator, for example. But, student should be able to send e-mail infrequently enough from any (most any) e-mail package.

Miscellaneous

144 Is it possible to print a copy of the readability from Microsoft Word? Please respond - Vicki Standiferd SCI 110 Ext 5917.

146 Students should receive tutorial help in the various computer classes to help with word processing, saving, and printing.

151 . . . Since Composition I is a core course for most programs, the opportunity to reach vast numbers of students is ideal for preparing these students.

151 …It's especially gratifying for me, as an instructor, to watch the students' skills and confidence grow during each semester. I try to teach them not only how to write, but to write well and to publish their writing.

156 …I assumed you mean "courses" as opposed to "sections."

203 …Clearly, this survey was written from a PC/Windows point of view. Is this survey information also going to be used to establish campus standard software? Ie . . . Explorer - Netscape.

206 I teach writing in a computer lab. I need to know more about computer applications. So my response isn t as informational as it could be.

214 I have had problems with the new prerequisite in CPCA 128 - Students get into this class not knowing anything about files and operating systems. Others come to learn about Microsoft Applications. The class cannot do the best job of working with both groups. We need to require either CPCA 105 or a skills test before CPCA 128.

Students' Computer Skills Good

016 Good students seem to have good computer skills. I don't know if the computer skills are the chickens or the eggs in the equation of what makes a good student.

137 I find that my students come with a broad range of ability. I let them self-declare their level of competence and team students with high computer skills with those of lower skills. I allow the students to do some of the teaching. Students are never graded on their ability to use a computer, but they are responsible for basic typing skills.

155 Students entering JCCC should already know keyboarding and basic computer skills. They should also have an acquaintance with e-mail and the Internet.

Importance of Computer Competencies for Entering JCCC Students:
A Survey of Faculty and Staff
Respondents' Verbatim Comments

Word Processing Skills

021 Basic word processing skills do impact early success of our program students. Additional computer skills needed for industry specific tasks are integrated into required curriculum. Beta CAD Spreadsheets.

140 In one short class I teach, they need to be proficient in any word processing program.

141 It is required in my class that a student effectively create an outline, however many times they are unable to indent and line these up correctly.

142 My class does not require computer skills, except they have many assignments that would be easier to do in a Word Program than by hand.

150 Students must know Word Perfect in order to format an APA style paper, as required for our classes. Most barely, know how to turn the computer into a word processor. I'm teaching computer skills to my classes.

153 The more my students know when they come to class the first day about using word processing software, the sooner we can get to writing!

159 Since I require my Comp. I students to use word processing on all of their papers and journals, they must possess a basic understanding of and ability to use a selected Word Processing package.

JCCC

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